COMPARISON OF MALE MICE (*Mus musculus*) ANTIBODY TITRES IN QUADRIVALEN INFLUENZA VACCINE (H1N1, H3N2, B VICTORIA AND B YAMAGATA) USING ONE SHOOT AND BOOSTER METHOD

Suci Ratna Dewi

ABSTRACT

This study aims to determine the differences in antibody titers in mice after in the quadrivalent influenza vaccine (H1N1, H3N2, BV, BY) using the one shoot and booster. This study used a non-parametric statistical method Friedman test method and kruskal-wallis test.In this study using 30 male mice were given three treatments, namely once quadrivalent influenza vaccine (oneshoot) and vaccinated with double-influenza quadrivalent vaccine (booster). (P1) in a single quadrivalent influenza vaccine (one shoot), (P2) twice vaccinated with influenza quadrivalent and 10 repetitions of each treatment. Taking blood in mice was carried out at the time of vaccination, on the 22nd day after vaccination and on the 36th day after vaccination. Immune response can be seen by observing mice antibody titers by HI testing (Hemagglutination inhibition). In this study the data on the oneshoot group did not show an increase in antibody titers in the post-vaccination observations on the 22nd and 36^{th} days, whereas in the booster group there was an increase in antibody titers on the 22nd day of the H3 (4.00) virus subtype. Whereas on the 36th day there was an increase in the H3 (36.00) virus subtypes, H1 (42.00) and BV (4.00). The data obtained were analyzed using the Friedman test and continued the Kruskal-wallis test showed that there were significant differences ($P < 0.05$) so that it can be concluded that influenza quadrivalent vaccines can increase antibody titers in boiled mice.

Keyword : Seasonal flu, Quadrivalen vaccine, titer antibody, Hemaglutination Inhibition